

AMENDMENTS TO THE CLAIMS

Please cancel claims 1-8 and 17-30 without prejudice or disclaimer. A complete listing of all pending claims is shown below

1. (Canceled)
2. (Canceled)
3. (Canceled)
4. (Canceled)
5. (Canceled)
6. (Canceled)
7. (Canceled)
8. (Canceled)
9. (Original) A method of producing an optical lens, comprising the steps of:

forming, on a substrate made of an optical material, a mask layer corresponding to a shape of an optical lens having a pattern whose width in a first direction is different from a width thereof in a second direction perpendicular to the first direction;

deforming the mask layer by heat treatment so that a surface area of the mask layer may be reduced; and

removing the mask layer and the substrate simultaneously to transfer the shape of the mask layer to the substrate to form the shape of the optical lens.
10. (Original) A method of producing an optical lens according to claim 9, wherein the mask layer is formed by performing a light-exposure and development process for a photosensitive material film to pattern the photosensitive material film.

11. (Original) A method of producing an optical lens according to claim 10, wherein, in the step of deforming the mask layer by heat treatment so that a surface area of the mask layer may be reduced, the heat treatment is performed at a temperature higher than a glass transition point of the photosensitive material film.

12. (Original) A method of producing an optical lens according to claim 10, wherein, in the step of deforming the mask layer by heat treatment so that a surface area of the mask layer may be reduced, the heat treatment is performed at a temperature lower than a carbonization temperature of the photosensitive material film.

13. (Original) A method of producing an optical lens according to claim 9, wherein, in the step of deforming the mask layer by heat treatment so that a surface area of the mask layer may be reduced, the heat treatment is performed at a temperature higher than a room temperature.

14. (Original) A method of producing an optical lens according to claim 9, wherein, in the step of removing the mask layer and the substrate simultaneously, a dry etching process is performed using the mask layer as a mask to transfer the shape of the mask layer to the substrate to form the shape of the optical lens.

15. (Original) A method of producing an optical lens according to claim 14, wherein the dry etching process is performed in a condition that selection ratios for the substrate and the mask layer are substantially equal to each other.

16. (Original) A method of producing an optical lens array, comprising the steps of:

forming, on a substrate made of an optical material, a plurality of mask layer portions corresponding to shapes of a plurality of optical lenses each having a pattern whose width in a first direction is different from a width thereof in a second direction perpendicular to the first direction;

deforming the mask layer portions by heat treatment so that a surface area of each of the mask layer portions may be reduced; and

removing the mask layer portions and the substrate simultaneously to transfer the shapes of the mask layer portions to the substrate to form the shapes of the optical lenses.

17. (Canceled)

18. (Canceled)

19. (Canceled)

20. (Canceled)

21. (Canceled)

22. (Canceled)

23. (Canceled)

24. (Canceled)

25. (Canceled)

26. (Canceled)

27. (Canceled)

28. (Canceled)

29. (Canceled)

30. (Canceled)